

LISTING OF CLAIMS

Claims 1-24. (Cancelled)

25. (Presently Amended) A process of using an enterobacterium OmpA protein, or a fragment thereof, for preparing a composition intended for specific targeting of a biologically active substance, which is associated with it, to antigen-presenting cells, wherein said enterobacterium OmpA protein, or fragment thereof, is internalized into the antigen presenting cells. A method for delivering a biologically active substance to antigen-presenting cells comprising the step of:

- a) covalently coupling said active substance to the OmpA protein of Klebsiella pneumoniae having the amino acid sequence of SEQ ID No. 2; and
- b) contacting said coupled active substance obtained in step a) with said antigen-presenting cells.

26. (Cancelled)

27. (Presently Amended) The process method of claim 25, wherein said antigen-presenting cells are chosen from dendritic cells, monocytes and B lymphocytes.

28. (Presently Amended) The process method of claim 27, wherein said antigen-presenting cells are dendritic cells.

29. (Cancelled)

30. (Cancelled)

31. (Presently Amended) The process method of claim 25, wherein said OmpA protein of enterobacterium is Klebsiella Klebsiella pneumoniae is a recombinant protein.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Presently Amended) The process method of claim 25 34, wherein the covalent coupling by covalent attachment is chemical coupling.

36. (Presently Amended) The process method of claim 35, wherein one or more attachment elements are introduced into said OmpA

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protein of *Klebsiella pneumoniae*, or a fragment thereof, and/or into said biologically active substance, in order to facilitate the chemical coupling.

37. (Presently Amended) The process method of claim 36, wherein said attachment element introduced is an amino acid.

38. (Presently Amended) The process method of claim 25 34, wherein said biologically active substance coupled by covalent attachment covalently coupled with said OmpA protein, or a fragment thereof, is a recombinant chimeric protein resulting from the expression of a nucleic acid construct encoding said biologically active substance and said OmpA protein, or a fragment thereof.

39. (Presently Amended) The process method of claim 25 38, wherein said biologically active substance is an antigen or a hapten.

40. (Withdrawn) A method for modifying the immune response to an antigen or a hapten with a composition intended for specific targeting of a biologically active substance, which is associated with it, to antigen-presenting cells, wherein an enterobacterium OmpA protein, or a fragment thereof, is internalized into the antigen-presenting cells.

41. (Withdrawn) The method of claim 40 for improving the immune response to an antigen or a hapten.

42. (Withdrawn) The method of claim 40 for preventing or treating a disease.

43. (Withdrawn) The method of claim 42, for preventing or treating a disease with an active substance, the effectiveness of which is modified by and/or linked to the internalization thereof by dendritic cells.

44. (Withdrawn) The method of claim 43, for preventing or treating cancers, preferably cancers associated with a tumor antigen, autoimmune diseases, allergies, graft rejections, cardiovascular diseases, diseases of the central nervous system, inflammatory diseases, infectious diseases or diseases linked to an immunodeficiency.

45. (Withdrawn) The method of claim 44, for preventing or treating an infectious disease or a cancer associated with a tumor antigen.

46. (Withdrawn) A pharmaceutical composition effective in the method of claim 42 which comprises an adjuvant of immunity.

47. (Withdrawn) The pharmaceutical composition of claim 46 which is vehicled in a form which makes it possible to improve the stability and/or immunogenicity thereof.

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48. (Withdrawn) The pharmaceutical composition of claim 46 which is vehicled in the form of a liposome, of a viral vector, or of a transformed host cell capable of expressing a recombinant chimeric protein resulting from the expression of a nucleic acid construct encoding said biologically active substance and said OmpA protein, or a fragment thereof.

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